Combustion Misfiring/Irregular Engine Running During Catalytic Converter Heating Phase and Yellow Malfunction Indicator Light (MIL) Active (SY 07/26)

Vehicle Type: **Panamera 4 E-Hybrid (YAA/YAB)**
Panamera 4S E-Hybrid (YAA/YAB)

Model Year: **As of 2024 up to 2025**

Information: **DME control unit**

Symptom: **The customer is complaining about irregular engine running during the catalytic converter heating phase and the yellow malfunction indicator light (MIL) on the instrument cluster lighting up.**

One or more of the following fault memory entries **is stored in the DME control unit fault memory**:

- **P030000** - Misfire detected **(0027DB)**
- **P030100** - Misfire cylinder 1 **(00295F)**
- **P030200** - Misfire cylinder 2 **(002960)**
- **P030300** - Misfire, cylinder 3 **(002961)**
- **P030400** - Misfire, cylinder 4 **(002962)**
- **P030500** - Misfire, cylinder 5 **(002963)**
- **P030600** - Misfire, cylinder 6 **(002964)**

Cause: Combustion misfiring can occur during the catalytic converter heating phase due to coking of the fuel injectors.

Information
The catalytic converter is in the heating phase at:

- Cold start of the combustion engine
- Restarting the combustion engine after a pure electric drive

Remedial Action: Create the vehicle analysis log (VAL) and check measured values of the stored fault memory entries.

If the fault memory entry was stored or occurred during the catalytic converter heating phase, re-program the DME control unit with the Porsche Tester.

Information
Minimum programming requirement is the Porsche Tester software release: **43.800.030** (or higher).

Required tools

Tools Information:
- **P90999 - Porsche Tester 4**
- Battery charger with a current rating of **at least 90 A** and a **current and voltage-controlled charge map** for lithium starter batteries, e.g. **VAS 5908 - battery charger 90 A**. For further information about the

battery chargers to be used, see the corresponding Workshop Manual. ⇒ *Workshop Manual '270689 Charge battery and vehicle electrical system'*

Creating vehicle analysis log (VAL) and checking measured values of stored fault memory entries

Work Procedure: 1 Create vehicle analysis log (VAL).

1.1 Connect and switch on the battery charger.
⇒ *Workshop Manual '270689A4 Charge battery and vehicle electrical system'*

1.2 Place original remote control in emergency start tray.

1.3 Connect **P90999 - Porsche Tester 4**, switch on the ignition and start the diagnostic application.

1.4 Create vehicle analysis protocol (FAP) and mark it with the attribute **"Pre-VAL"**.

2 In the vehicle analysis log (VAL), check the stored fault memory entries in the DME control unit.

2.1 Open vehicle analysis log (FAP)

2.2 Check whether one of the fault memory entries in the DME control unit regarding combustion misfiring occurred during the catalytic converter heating phase.

To do this, read out the measured value **"20_Faults – measured values: engine torque"**.

Assessment	Action
The measured value is **not** between 85 (62.6 ftlb.) and 92 (67.8 ftlb.) Nm.	The fault memory entry did **not** occur or become stored during the catalytic converter heating phase. The action described in this symptom-based repair description (SY) is not expedient in this case. Continue troubleshooting in some other way. **Note:** Combustion misfiring can also be caused by an empty tank or by defective injectors, spark plugs or ignition coils, for example. **End of action.**
The measured value is between 85 (62.6 ftlb.) and 92 (67.8 ftlb.) Nm.	The fault memory entry occurred or was stored during the catalytic converter heating phase. Continue with: ⇒ *Technical Information '270689A4 Program DME control unit'*

Program DME control unit

Work procedure: 1 Re-program DME control unit.

The basic work procedure for control unit programming is described in the Workshop Manual.
⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*

Specific information on control unit programming during this action:

Required Porsche Tester software release:	**43.800.030** (or higher)
Type of control unit programming:	Control unit programming using the **'Automatic programming'** function for the DME control unit: **'DME'** control unit – **'Coding/programming'** menu – **'Automatic programming'** function.
Programming sequence:	Read and follow the **information and instructions on the Porsche Tester** during the guided programming sequence. During the programming sequence, the **DME control unit** is re-programmed first, and then the **transmission control unit** is **re-programmed**. Thereafter, both control units are **automatically** re-**coded**. **Do not interrupt the programming and coding process.** Backup documentation for the re-programmed software releases starts after programming.
Programming duration:	Programming takes up to **12 minutes**, depending on equipment.
Software programmed during this action:	See section: ⇒ *Technical Information '9X00IN Overview of programmed DME data records'* Following control unit programming, the software release can be read out using the PIWIS Tester in the menu ⇒ 'Extended identifications'.
Procedure if error messages appear during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*
Procedure in the event of a termination in the control unit programming:	Repeat control unit programming by restarting programming.

2 Read out and delete all control unit fault memories.

Information

If control units are found to have faults that are **not** caused by control unit programming, they must first be **located** and **corrected**. This work **cannot** be invoiced under the workshop campaign number.

3 Press F3 to start the integration test in the control unit selection.
If there is an integration deviation for individual control units, these must be programmed before vehicle handover to the customer.

Information

If, despite the programming performed, a deviation is still displayed during the integration test, the test must be carried out again.
There must be no breaches of integration!
Control units with optional software can be ignored – with the exception of the DME control unit and the transmission control unit.

4 Exit the diagnostic application, switch off the ignition and disconnect **P90999 - Porsche Tester 4** from the vehicle.

5 Switch off and disconnect the battery charger.
⇒ *Workshop Manual '270689 Charging the vehicle electrical system battery'*

Overview of programmed DME data records

Information

The software part number and software release of the programmed data record are based on the specified Porsche Tester software release. Please note that this may be different in a higher release.

Overview: **Panamera 4 E-Hybrid (YAA/YAB):**

Exhaust emission standard	Model year		Porsche part number (software)	Software release
	2024 (R)	2025 (S)		
ULEV70	-	X	976907552AN	0001 (or higher)
ULEV70	-	X	976907552BC	0002 (or higher)

Panamera 4S E-Hybrid (YAA/YAB):

Exhaust emission standard	Model year		Porsche part number (software)	Software release
	2024 (R)	2025 (S)		
ULEV70	-	X	976907552BG	0002 (or higher)
ULEV70	-	X	976907552AS	0001 (or higher)

Labor position and PCSS encryption

Working position:

APOS	Labor operation	I No.
24702541	Re-programming DME control unit	

PCSS encryption:

Location (FES5)	24400	Injector valve
Damage type (SA4)	1613	temporarily not functioning